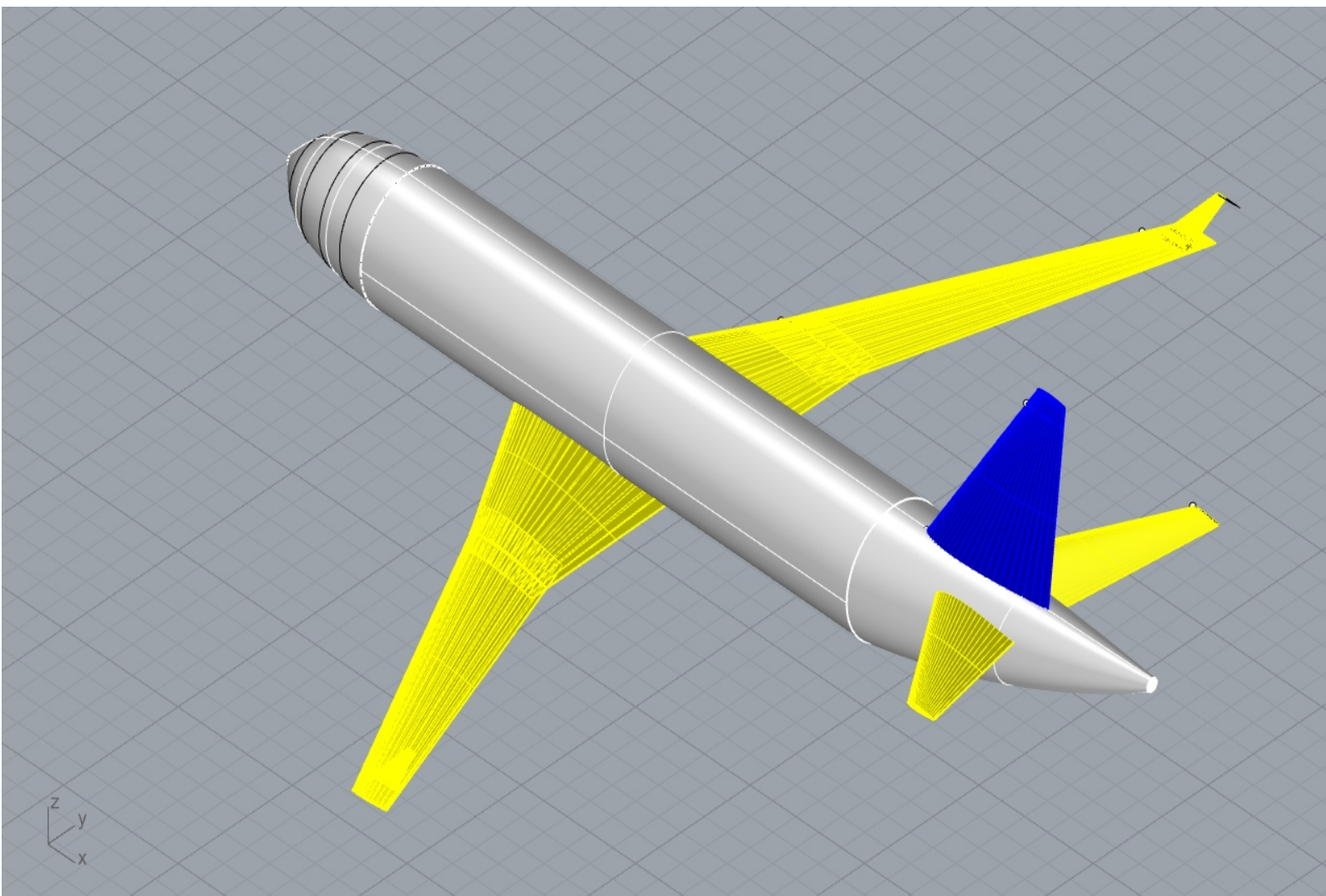


# Delft University of Technology

## Knowledge Based Engineering

AE4204

### Project Output Report (Team-13)



# Table Of Contents

# Section A: Aircraft Dimensions

Aircraft Parameters	Initial Values	Final Values
Fuselage Length (m)	37.80819274594121	37.80819274594121
Cabin Diameter (m)	4.14	4.14
Nose Slenderness Ratio	1.22	1.22
Tail Slenderness Ratio	2.724	2.724
Wing Quarter Chord Sweep (deg)	26.852085610876962	26.852085610876962
Wing Dihedral (deg)	3.0	3.0
Total Wing Area (sq. m)	121.77670747468754	121.77670747468754
Cruise mach Number	0.756	0.756
Wing Twist (deg)	-5.0	-5.0
Wing Span (m)	34.0	34.0
Wing Root Chord (m)	7.0	7.0
Horizontal Tail Aspect Ratio	5	5
Horizontal Tail Span (m)	12.449899597988733	12.449899597988733
Horizontal Tail Sweep (deg)	36.85208561087696	36.85208561087696
Horizontal Tail Arm (m)	16.578331411447508	16.578331411447508
Horizontal Tail Root Chord (m)	3.830738337842687	3.830738337842687
Horizontal Tail Taper Ratio	0.3	0.3
Horizontal Tail Area (sq. m)	31.0	31.0
Horizontal Tail Dihedral (deg)	5.0	5.0
Vertical Tail Taper Ratio	0.3	0.3
Vertical Tail Span (m)	6.255397669213365	6.255397669213365
Vertical Tail Arm (m)	15.983900860165965	15.983900860165965
Vertical Tail Sweep (deg)	35.0	35.0
Vertical Tail Aspect Ratio	1.82	1.82
Vertical Tail Area (sq. m)	21.5	21.5

Section B: Different views of the aricraft

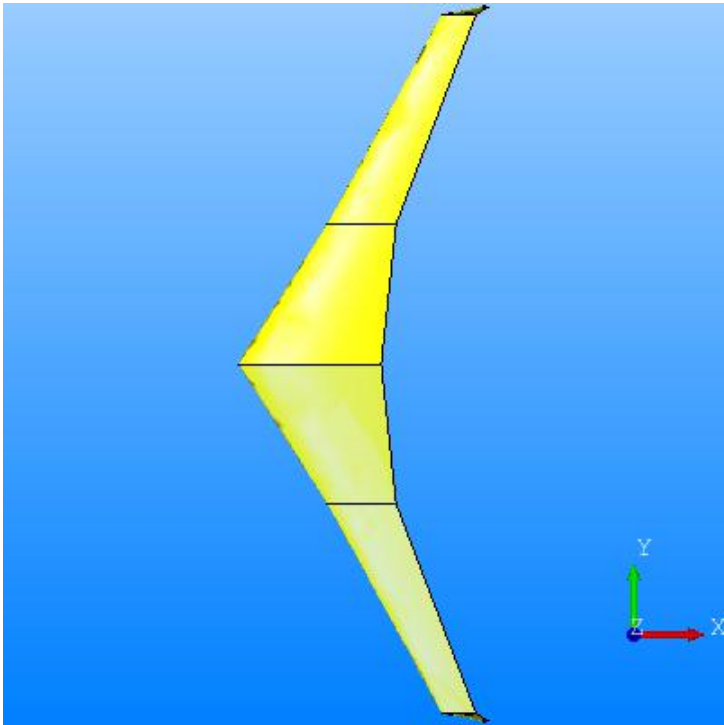


Figure 1

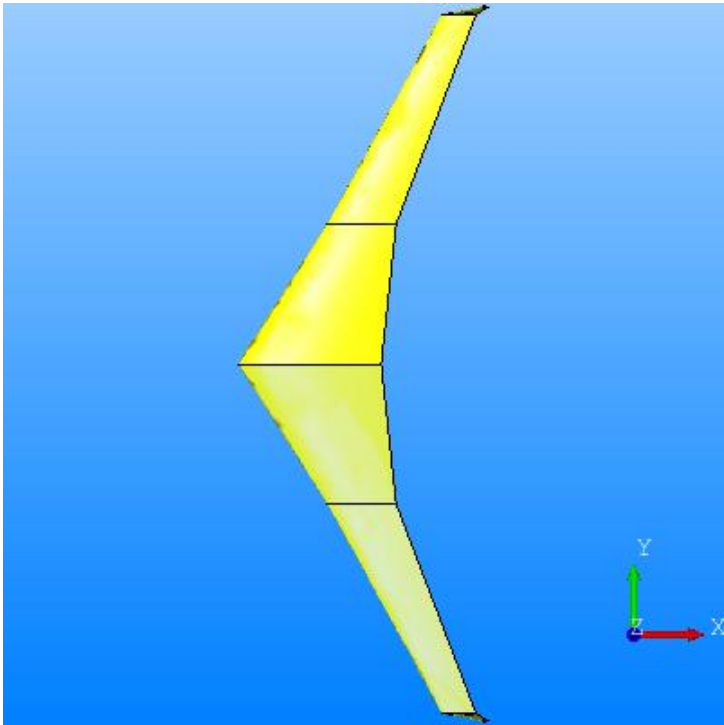


Figure 2

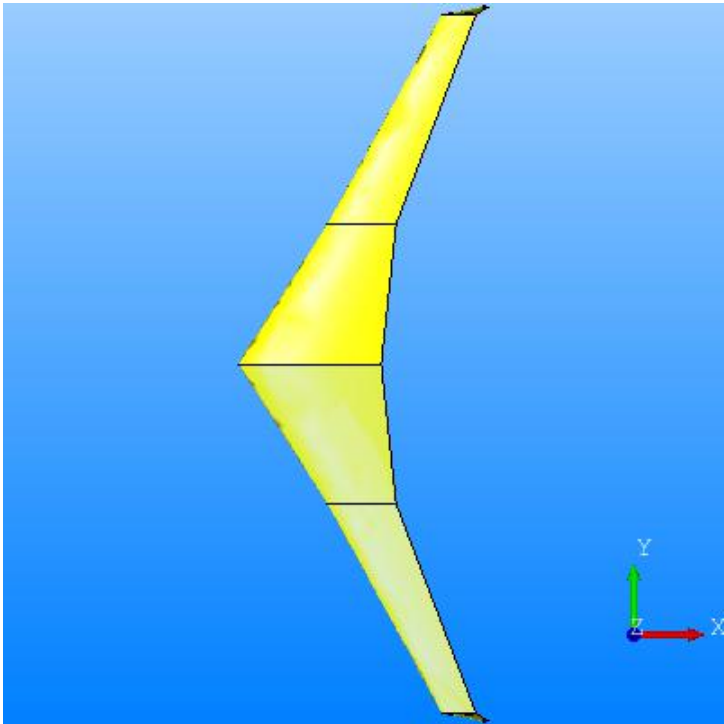


Figure 3

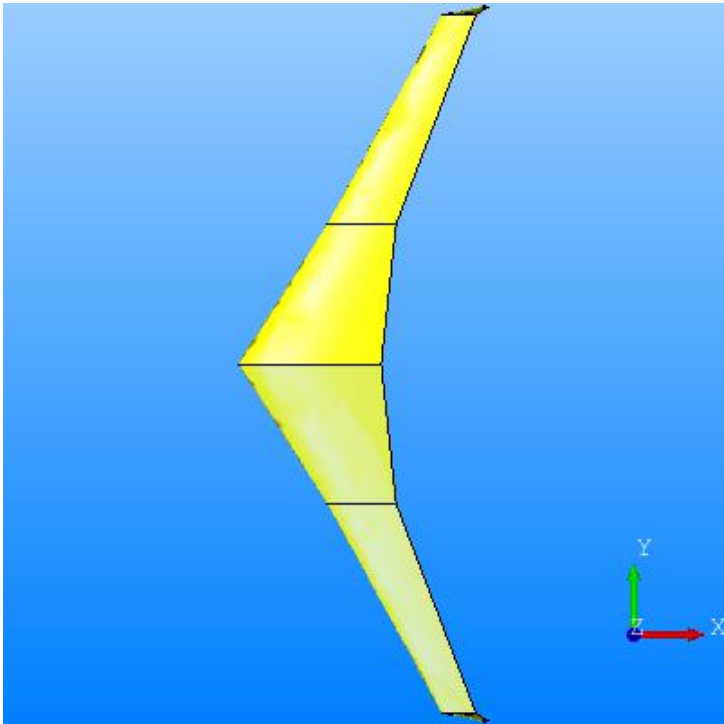
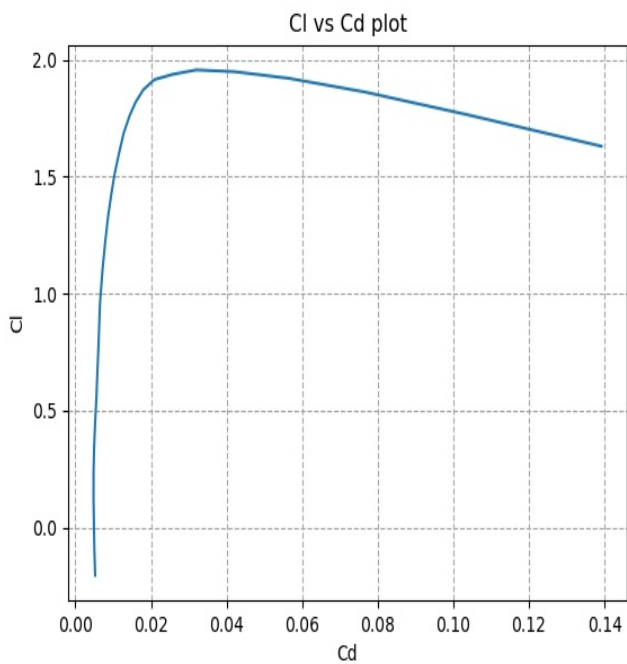
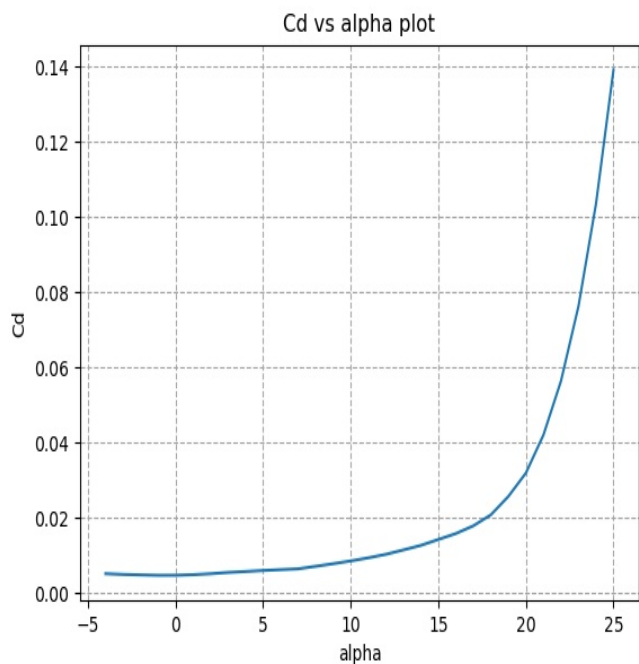


Figure 4

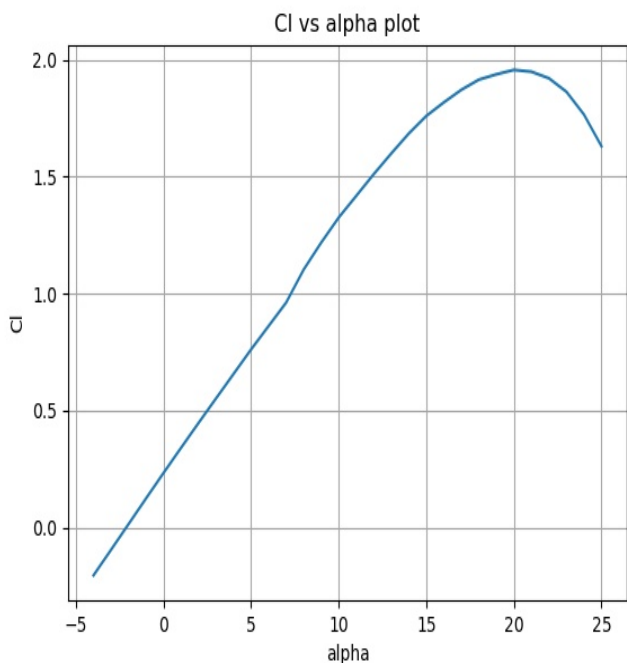
# Section C: Plots



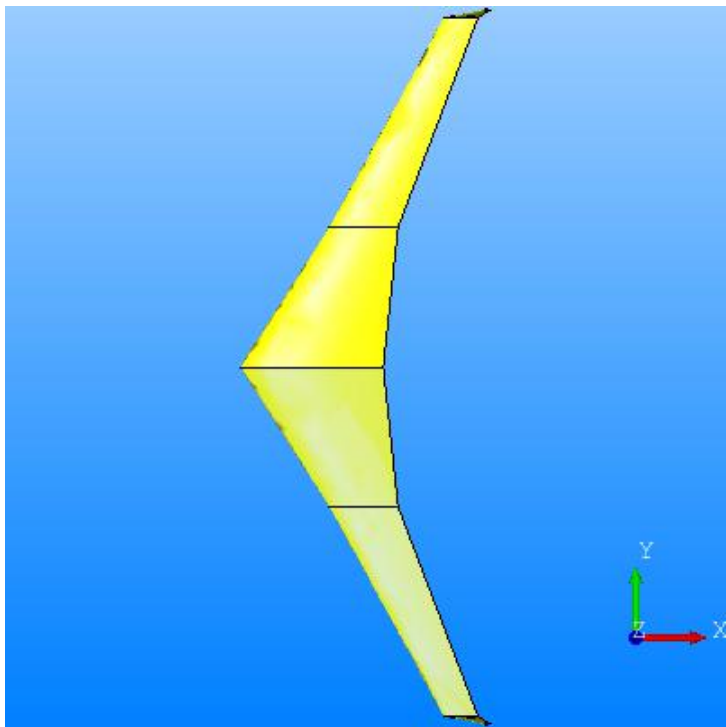
Plot 1



Plot 2



Plot 3



Plot 4